Abstract

Compound of the general formula (I)

$$X(B)_m \qquad\qquad (I)$$

wherein

X   is an m-valent unit and

B   are identical or different and denote K-R,

   wherein

   K   is   a bond or is $A^1-(A^2-A^3)_k$-sp, wherein

   A^1 is $(CH_2)_tY(CH_2)_u$, wherein

   Y   is >C=O, >NH, -O-, -S- or a bond,

   t   is an integer from 0 to 6 and

   u   is an integer from 0 to 6,

   A^2 is -NHCO-, -CONH-, -OCONH- or SCONH-, or is –CO-,

   A^3 is $(CH_2)_r$, $O(CH_2)_r$, $NH(CH_2)_r$, $S(CH_2)_r$ or -(CHQ)-, wherein

   r   is an integer from 1 to 6 and

   Q   is a substituted or unsubstituted alkyl or aryl group,

   sp   is a divalent spacer or a bond, and

   k   is an integer from 5 to 100, and

   R   is hydrogen; a ligand suitable for specific bonding to a receptor; a marker molecule; or a catalytically active group; and

m   is at least 2,

with the proviso that

(1)   in the compound at least one R is not hydrogen,

(2)   there are at least two K that are not a bond, and

(3)   X, B and m are so selected that an intermolecular association of the K in liquid phase by the formation of hydrogen bonds is possible, with formation of aggregates that present on the surface a plurality of R that are not hydrogen, and

(4)   the molar mass of the fragment $X(K)_m$ is less than 20,000.